

## CLAIMS

1. A method for timing a change of diversity weights in a radio connection between a base station and a terminal, comprising the steps of:
  - selecting a response timing mode from a number of predefined response timing modes,
  - informing the terminal about the selected response timing mode,
  - receiving an initiation from the terminal and
  - responding to said initiation by changing certain diversity weights so that the exact moment of time for effecting the change is determined by said selected response timing mode.
2. A method according to claim 1, wherein the step of selecting a response timing mode comprises the substeps of:
  - measuring a propagation delay between the base station and the terminal and
  - mapping the measured propagation delay into a certain response timing mode.
3. A method according to claim 1, wherein the step of selecting a response timing mode comprises the substep of selecting a response timing mode based on the cell size of the base station.
4. A method according to claim 1, wherein the step of selecting a response timing mode comprises the substep of selecting a response timing mode based on the processing capacity of the base station.
5. A method according to claim 1, wherein the steps of receiving an initiation from the terminal and responding to said initiation by changing certain diversity weights comprise the substeps of:
  - receiving said initiation from the terminal in a certain  $j$ :th time slot and
  - effecting the change of diversity weights in either the  $(j+1) \bmod M$ :th time slot or the  $(j+2) \bmod M$ :th time slot depending on which of two predefined response timing modes has been selected, where  $M$  is the length of the cycle in a cyclic numbering scheme of time slots.
6. An arrangement for timing a change of diversity weights in a radio connection between a base station and a terminal, comprising:
  - means for selecting a response timing mode from a number of predefined response timing modes,
  - means for informing the terminal about the selected response timing mode,

- means for receiving an initiation from the terminal and
- means for responding to said initiation by changing certain diversity weights so that the exact moment of time for effecting the change is determined by said selected response timing mode.

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